

REMARKS

The final Office Action mailed July 5, 2007 has been carefully reviewed and the foregoing amendment has been made in consequence thereof.

Claims 10-20 are now pending in this application. Claims 10-20 stand rejected.

The rejection of Claim 10 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,823,878 to Gadini (hereinafter referred to as "Gadini") is respectfully traversed.

Gadini describes a control system for softening water and channeling the water to a dishwasher. The dishwasher includes a tub (1) and two rotary spraying arms (2 and 3) that spray water into the tub (1). A pump (4) pumps water from the bottom of the tub (1) through a first duct (5) towards the arms (2 and 3). A second duct (8) is in flow communication with a main water supply using a supply valve (9). The water is channeled from the main water supply through the supply valve (9) to a tank (26). The tank (26) is in flow communication with a decalcifier (10). The decalcifier (10) is in flow communication with a dishwasher inlet duct using a valve (13). The inlet duct channels water into the tub (1). The control system controls the amount of water supplied from the main water supply to the dishwasher by controlling the valves (9 and 13). Notably, Gadini does not describe or suggest a dishwasher that includes a water supply line having a first diameter, a valve that delivers water from the water supply line to the wash chamber, and a turbine ratemeter in flow communication the valve, wherein the turbine ratemeter meters a quantity of water flow through the valve and generates a signal that includes a plurality of square waves representing the quantity of water flow through the valve. Moreover, Gadini does not describe or suggest a dishwasher that includes a restrictor tube in flow communication with the turbine ratemeter, wherein the restrictor tube has a second diameter that is smaller than the first diameter.

Claim 10 recites a dishwasher comprising "a wash chamber; a water supply line in flow communication with said wash chamber, said water supply line having a first diameter; a valve configured to deliver water from said water supply line into said wash chamber; a turbine ratemeter in flow communication with said valve, said turbine ratemeter configured to

meter a quantity of water flow through said valve and generate a signal comprising a plurality of square waves representing the quantity of water flow through said valve; a restrictor tube in flow communication with said turbine ratemeter, said restrictor tube having a second diameter smaller than said first diameter; and a controller in signal communication with said turbine ratemeter, said controller controlling said valve in response to the signal received from the turbine ratemeter.”

Gadini does not describe or suggest a dishwasher, as recited in Claim 10. More specifically, Gadini does not describe or suggest a dishwasher that includes a water supply line having a first diameter, a valve that delivers water from the water supply line to the wash chamber, and a turbine ratemeter in flow communication the valve, wherein the turbine ratemeter is configured to meter a quantity of water flow through the valve and generate a signal that includes a plurality of square waves representing the quantity of water flow through the valve. Moreover, Gadini does not describe or suggest a dishwasher that includes a restrictor tube in flow communication with the turbine ratemeter, wherein the restrictor tube has a second diameter that is smaller that the first diameter. Rather, in contrast to the present invention, Gadini merely describes a control system for softening water and channeling the softened water to a dishwasher by controlling a first valve to channel an amount of water from a water supply line to a tank and a decalcifier, and controlling a second valve to channel the water in the tank and decalcifier to the dishwasher.

Accordingly, for at least the reasons set forth above, Claim 10 is submitted to be patentable over Gadini.

For at least reasons set forth above, Applicants respectfully request the Section 102 rejection of Claim 10 be withdrawn.

The rejection of Claims 11-20 under 35 U.S.C. § 103(a) as being unpatentable over Gadini in view of U.S. Patent No. 5,330,580 to Whipple, III et al. (hereinafter referred to as “Whipple”) is respectfully traversed.

Gadini is described above.

Whipple describes a dishwasher (10) that includes a device (60) including a sensor for detecting power consumption surges of a motor (75) as a frame (20) receives water channeled from a water source through a valve (30) coupled within a conduit (100). A controller (200) is used to control the valve (30). Cavitation of the water indicates that less than a sufficient amount of water has been received by the frame (20) for a particular wash cycle. The device (60) uses the controller (200) to control the valve (30) to channel an amount of additional water through the valve (30) such that the cavitation is reduced. The cavitation of the water and the power consumption of the motor (75) are reduced as the frame (20) receives an amount of water sufficient for the wash cycle. Notably, Whipple does not describe or suggest a dishwasher that includes a water supply line having a first diameter, a valve that delivers water from the water supply line to the wash chamber, and a turbine ratemeter in flow communication the valve, wherein the turbine ratemeter is configured to meter a quantity of water flow through the valve and generate a signal that includes a plurality of square waves representing the quantity of water flow through the valve. Moreover, Whipple does not describe or suggest a dishwasher that includes a restrictor tube in flow communication with the turbine ratemeter, wherein the restrictor tube has a second diameter that is smaller than the first diameter.

Claim 10 recites a dishwasher comprising “a wash chamber; a water supply line in flow communication with said wash chamber, said water supply line having a first diameter; a valve configured to deliver water from said water supply line into said wash chamber; a turbine ratemeter in flow communication with said valve, said turbine ratemeter configured to meter a quantity of water flow through said valve and generate a signal comprising a plurality of square waves representing the quantity of water flow through said valve; a restrictor tube in flow communication with said turbine ratemeter, said restrictor tube having a second diameter smaller than said first diameter; and a controller in signal communication with said turbine ratemeter, said controller controlling said valve in response to the signal received from the turbine ratemeter.”

Neither Gadini nor Whipple, considered alone or in combination, describes or suggests a dishwasher, as recited in Claim 10. More specifically, neither Gadini nor

Whipple, considered alone or in combination, describes or suggests a dishwasher that includes a water supply line having a first diameter, a valve that delivers water from the water supply line to the wash chamber, and a turbine ratemeter in flow communication the valve, wherein the turbine ratemeter is configured to meter a quantity of water through the valve and generate a signal that includes a plurality of square waves representing the quantity of water through the valve. Moreover, Whipple does not describe or suggest a dishwasher that includes a restrictor tube in flow communication with the ratemeter, wherein the restrictor tube has a second diameter that is smaller that the first diameter. Rather, in contrast to the present invention, Gadini merely describes a control system for softening water and channeling the softened water to a dishwasher by controlling a first valve to channel an amount of water from a water supply line to a tank and a decalcifier, and controlling a second valve to channel the water in the tank and decalcifier to the dishwasher. Whipple merely describes a dishwasher that senses cavitation in a pump and controls a valve to supply an amount of additional water to the dishwasher to reduce the cavitation.

Accordingly, for at least the reasons set forth above, Claim 10 is respectfully submitted to be patentable over Gadini in view of Whipple.

Claims 11-13 depend from independent Clam 10. When the recitations of Claims 11-13 are considered in combination with the recitations of Claim 10, Applicants submit that Claims 11-13 likewise are patentable over Gadini in view of Whipple.

Claim 14 recites a dishwasher comprising “a wash chamber; a water supply line in flow communication with said wash chamber, said water supply line having a first diameter; a valve and a turbine ratemeter positioned to deliver a metered amount of water into said wash chamber; a restrictor tube in flow communication with said turbine ratemeter, said restrictor tube having a second diameter smaller than said first diameter; and a controller coupled to said valve and said turbine ratemeter, said controller configured to deliver a first amount of water to the dishwasher for a first dishwashing cycle; monitor at least one operation of the dishwasher during the first dishwashing cycle to detect an underfill condition; add additional water to the dishwasher upon detecting at least one underfill condition during the first dishwashing cycle; retain a first total amount of additional water

added during the first dishwashing cycle; deliver the first amount of water to the dishwasher for a second dishwashing cycle subsequent the first cycle; monitor at least one operation of the dishwasher during the second dishwashing cycle to detect an underfill condition; add additional water to the dishwasher upon detecting at least one underfill condition during the second dishwasher cycle; retain a second total amount of additional water added during the second dishwashing cycle; and determine a second amount of water to deliver to the dishwasher for a third dishwashing cycle subsequent the second cycle using the retained first total amount of additional water added and the retained second total amount of additional water added.”

Neither Gadini nor Whipple, considered alone or in combination, describes or suggests a dishwasher as recited in Claim 14. More specifically, neither Gadini nor Whipple, considered alone or in combination, describes or suggests a dishwasher that includes a water supply line having a first diameter, a valve that delivers water from the water supply line to the wash chamber, and a turbine ratemeter in flow communication the valve, wherein the turbine ratemeter is configured to meter a quantity of water flow through the valve and generate a signal that includes a plurality of square waves representing the quantity of water flow through the valve. Moreover, neither Gadini nor Whipple, considered alone or in combination, describes or suggests a dishwasher that includes a restrictor tube in flow communication with the ratemeter, wherein the restrictor tube has a second diameter that is smaller than the first diameter. Rather, in contrast to the present invention, Gadini merely describes a control system for softening water and channeling the softened water to a dishwasher by controlling a first valve to channel an amount of water from a water supply line to a tank and a decalcifier, and controlling a second valve to channel the water in the tank and decalcifier to the dishwasher. Whipple merely describes a dishwasher that senses cavitation in a pump and controls a valve to supply an amount of additional water to the dishwasher to reduce the cavitation.

Accordingly, for at least the reasons set forth above, Claim 14 is respectfully submitted to be patentable over Gadini in view of Whipple.

Claims 15-20 depend from independent Claim 14. When the recitations of Claims 15-20 are considered in combination with the recitations of Claim 14, Applicants submit that Claims 15-20 likewise are patentable over Gadini in view of Whipple.

For at least reasons set forth above, Applicants respectfully request the Section 103 rejection of Claims 11-20 be withdrawn.

In view of the foregoing amendment and remarks, all the claims now active in this application are believed to be in condition for allowance. Reconsideration and favorable action is respectfully solicited.

Respectfully submitted,



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